

AMENDMENTS

Please amend the application as indicated hereafter.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A driving method for a pixel array, at least one row of the pixel array comprising a plurality of pixel sets, and at least one of the pixel sets comprising a plurality of pixels, the driving method comprising:

providing a plurality of voltages having substantially same phase to a plurality of pixel electrodes of the pixels of one of the pixel sets;

providing at least two voltages with phases substantially opposite to each other to the pixel electrodes of the pixels of two of the adjacent pixel sets respectively, wherein a I^{th} pixel set comprises W pixels, a pixel of the I^{th} pixel set in x^{th} row and y^{th} column is expressed as $P_I(x,y)$, and I , W , x , y are integers;

driving pixels $P_I(x,y)$, $P_K(x+1,y+1)$, $P_I(x,y+2), \dots, P_K(x+1,y+W-2)$, $P_I(x,y+W-1)$, $P_J(x,y+W)$, $P_L(x+1,y+W+1)$, $P_J(x,y+W+2), \dots, P_L(x+1,y+2W-2)$, $P_J(x,y+2W-1)$ by a first gate line, wherein K^{th} , J^{th} , and L^{th} pixel sets adjacent to the I^{th} pixel set comprise W pixels respectively, and K , J , and L are integers; and

driving pixels $P_K(x+1,y)$, $P_{\Omega[[M]]}(x+2,y+1)$, $P_K(x+1,y+2), \dots$, $P_{\Omega[[M]]}(x+2,y+W-2)$, $P_K(x+1,y+W-1)$, $P_L(x+1,y+W)$, $P_N(x+2,y+W+1)$, $P_L(x+1,y+W+2), \dots$, $P_N(x+2,y+2W-2)$, $P_L(x+1,y+2W-1)$ by a second gate line, wherein O^{th} and N^{th} pixel sets adjacent to the K^{th} and L^{th} pixel sets comprise W pixels, and O, N are integers.

Claim 2 (original) The driving method of claim 1, wherein each of the pixel sets comprises three pixels.

Claim 3 (original) The driving method of claim 1, wherein a number of the pixels of each of the pixel set is $3*M$, wherein M is a positive integer.

Claim 4 (cancelled)

Claim 5 (currently amended) A driving method for a pixel array, the pixel array comprising a plurality of pixels, the pixel array corresponding to a plurality of gate lines and a plurality of data lines, the pixels respectively corresponding to a plurality of pixel electrodes each row of the pixel array comprising at least one pixel set, at least one of the pixel set comprising a plurality of pixels, and each pixel set corresponding to a data line set, the driving method comprising:

grouping the pixels in each row into a plurality of pixel sets logically;

driving two adjacent pixels in two of the pixel sets in the same row respectively by the same gate line;

driving a first pixel and a second pixel in the same pixel set by two different gate lines respectively, wherein the first pixel and the second pixel are in two adjacent columns respectively; and

driving the pixels in each column respectively by the same data lines, wherein the driving polarities of the adjacent data lines are opposite to each other,

wherein when the gates line are sequentially enabled, the driving polarities of the pixel electrodes of the pixels in the same pixel set are substantially the same and the driving polarities of the pixel electrodes of the pixels respectively in the adjacent pixel sets are substantially opposite to each other.

determining whether a prior data line and a recent data line belong to same data line set or not;

wherein when the prior data line and the recent data line do not belong to same data line set, the recent data line is used to drive the pixel disposed neighboring the pixel driven by the prior data line, and the pixel driven by the prior data line and the pixel driven by the recent data line are in the same row and driven by the same gate line; and

when the prior data line and the recent data line belong to same data line set, the recent data line is used to drive a pixel disposed in another row apart from the pixel driven by the prior data line, wherein the pixel driven by the prior data line and the pixel driven by the recent data line are driven by the same gate line.

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Claim 6 (original) The driving method of claim 5, wherein each of the pixel sets comprises three pixels.

Claim 7 (original) The driving method of claim 5, wherein a number of the pixels of each of the pixel set is $3*M$, wherein M is a positive integer.